Large bandgap of pressurized trilayer graphene

Proceedings of the National Academy of Sciences of the Unite
116, 9186-9190
DOI: 10.1073/pnas.1820890116

Citation Report

#	Article	IF	Citations
1	High harmonic generation in grapheneâ€“boron nitride heterostructures. Journal of Materials Chemistry C, 2020, 8, 12085-12091.	2.7	14
2	Ab initio insights into the stabilization and binding mechanisms of MoS₂ nanoflakes supported on graphene. Physical Chemistry Chemical Physics, 2020, 22, 26865-26875.	1.3	2
3	Pressure-driven significant phonon mode softening and robust superconductivity in layered germanium phosphide. Journal of Materials Chemistry A, 2020, 8, 20054-20061.	5.2	17
4	Band Engineering of Large-Twist-Angle <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>Graphene</mml:mtext><mml:mo>/</mml:mo><mml:mrow><mml:mi>h</mml:mi><mml:mte MoirÃ© Superlattices with Pressure. Physical Review Letters, 2020, 125, 226403.	2.9	17
5	2D Materials and Heterostructures at Extreme Pressure. Advanced Science, 2020, 7, 2002697.	5.6	68
6	The important role of strain on phonon hydrodynamics in diamond-like bi-layer graphene. Nanotechnology, 2020, 31, 335711.	1.3	30
7	Mechanical properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si88.svg"><mml:mrow><mml:msup><mml:mrow><mml:mi mathvariant="italic">sp</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msup></mml:mrow></mml:m carbon and boron nitride 2D membranes: A first principles study. Computational Materials Science, 2020, 179, 109635.	1.4	11
8	Optical absorbance in multilayer two-dimensional materials: Graphene and antimonene. Applied Physics Letters, 2020, 116, .	1.5	33
9	Variable angle spectroscopic ellipsometry characterization of turbostratic CVD-grown bilayer and trilayer graphene. Optical Materials, 2020, 107, 110165.	1.7	14
10	Prediction of a novel robust superconducting state in TaS₂ under high pressure. Physical Chemistry Chemical Physics, 2020, 22, 8827-8833.	1.3	7
11	Diamond-graphite nanocomposite synthesized from multi-walled carbon nanotubes fibers. Carbon, 2021, 172, 138-143.	5.4	20
12	Hard, transparent, sp3-containing 2D phase formed from few-layer graphene under compression. Carbon, 2021, 173, 744-757.	5.4	31
13	Pressureâ€Induced Formation and Mechanical Properties of 2D Diamond Boron Nitride. Advanced Science, 2021, 8, 2002541.	5.6	11
14	Stronger Interlayer Interactions Contribute to Faster Hot Carrier Cooling of Bilayer Graphene under Pressure. Physical Review Letters, 2021, 126, 027402.	2.9	19
15	Variable-Angle Spectroscopic Ellipsometry of Graphene-Based Films. Coatings, 2021, 11, 462.	1.2	8
16	Fragmentation and structural transitions of few-layer graphene under high shear stress. Applied Physics Letters, 2021, 118, .	1.5	4
17	Tuning the Direct and Indirect Excitonic Transitions of h-BN by Hydrostatic Pressure. Journal of Physical Chemistry C, 2021, 125, 12880-12885.	1.5	8
18	Two-Dimensional Diamondâ€”Diamane: Current State and Further Prospects. Nano Letters, 2021, 21, 5475-5484.	4.5	64

#	Article	IF	Citations
19	Computational Prediction of a Novel Superhard sp ³ Trigonal Carbon Allotrope with Bandgap Larger than Diamond. Chinese Physics Letters, 2021, 38, 076101.	1.3	14
20	Narrow-gap, semiconducting, superhard amorphous carbon with high toughness, derived from C60 fullerene. Cell Reports Physical Science, 2021, 2, 100575.	2.8	18
21	Structural transformation and transport behavior of mixed valence compound Sn3O4 under high pressure. Journal of Alloys and Compounds, 2021, 886, 161197.	2.8	1
22	Suppression of the antiferromagnetic metallic state in the pressurized <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>MnB</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">T</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math> single crystal. Physical Review Materials, 2019, 3, .	0.9	45
23	Steering on Degrees of Freedom of 2D Van der Waals Heterostructures. Small Science, 2022, 2, 2100033.	5.8	13
24	Layer-Dependent Pressure Effect on the Electronic Structure of 2D Black Phosphorus. Physical Review Letters, 2021, 127, 186401.	2.9	17
25	Metallization and Superconductivity in the van der Waals Compound CuP₂Se through Pressure-Tuning of the Interlayer Coupling. Journal of the American Chemical Society, 2021, 143, 20343-20355.	6.6	10
26	High pressure studies of 2D materials and heterostructures: A review. Materials and Design, 2022, 213, 110363.	3.3	35
27	Dehydro-Dielsâ€"Alder reaction and diamondization of bowl-shaped clusters C18Te3Br4(Bu-O)6. Nano Research, 0, , 1.	5.8	2
28	Perspectives of 2D Materials for Optoelectronic Integration. Advanced Functional Materials, 2022, 32, .	7.8	62
29	Electronic structure of trilayer graphene with internal layer broken. Molecular Physics, 2022, 120, .	0.8	1
30	Tunable excitons in rhombohedral trilayer graphene. Physical Review B, 2022, 105, .	1.1	4
31	Research progress on penta-graphene and its related materials: Properties and applications. Nano Today, 2022, 44, 101501.	6.2	45
32	Electricâ€Fieldâ€Tunable Bandgaps in the Inverseâ€Designed Nanoporous Graphene/Graphene Heterobilayers. Advanced Electronic Materials, 2022, 8, .	2.6	3
33	Configuration stability and electronic properties of diamane with boron and nitrogen dopants. Physical Review B, 2022, 105, .	1.1	4
34	Advances in Flexible Optoelectronics Based on Chemical Vapor Depositionâ€Grown Graphene. Advanced Functional Materials, 2022, 32, .	7.8	19
35	Band gap formation of 2D materialin graphene: Future prospect and challenges. Results in Engineering, 2022, 15, 100474.	2.2	20
36	The electronic structures and predominant thermoelectric performance of the twisted InSb/Graphene bilayer. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 143, 115358.	1.3	2

#	Article	IF	Citations
37	Two-dimensional diamonds from sp2-to-sp3 phase transitions. Nature Reviews Materials, 2022, 7, 814-832.	23.3	28
38	Symmetric Breakage-Induced Semimetallic State: Polymorphism in Ruthenate Nanosheets. Journal of the American Chemical Society, 2022, 144, 15008-15012.	6.6	4
39	Graphene bandgap opening by constructing superlattices with BN or MoO₂ under pressure. Journal of Physics: Conference Series, 2022, 2331, 012001.	0.3	0
40	Interlayer Coupling: An Additional Degree of Freedom in Two-Dimensional Materials. ACS Nano, 2022, 16, 11498-11503.	7.3	17
41	Pressure-Engineered Ti₃C₂T_x MXene with Enhanced Conductivity and Accelerated Reaction Kinetics of Lithium Storage. ACS Applied Materials & Interfaces, 2022, 14, 46056-46067.	4.0	2
42	Electron and ion transport behavior of Vanadium based MXene induced by pressure for Lithium ion intercalated electrodes. Journal of Colloid and Interface Science, 2023, 633, 207-217.	5.0	3
43	A review on few-layer graphene flakes deposition by kinetic spray process for energy storage devices. AIP Conference Proceedings, 2022, , .	0.3	0
44	Quasi-One-Dimensional Metallicity in Compressed CsSnI₃. Journal of the American Chemical Society, 2022, 144, 23595-23602.	6.6	2
45	Formation of Diamane Nanostructures in Bilayer Graphene on Langasite under Irradiation with a Focused Electron Beam. Nanomaterials, 2022, 12, 4408.	1.9	5
46	Van der Waals Black Phosphorus/Bi₁₀O₆S₉ Heterojunction Harvesting Ambient Electric Field Energy for Enhanced Photoelectrochemical Sense. Journal of Physical Chemistry C, 2023, 127, 1229-1243.	1.5	2
47	Raman spectroscopy of carbon materials and their composites: Graphene, nanotubes and fibres. Progress in Materials Science, 2023, 135, 101089.	16.0	120
48	Modulating Charge-Density Wave Order and Superconductivity from Two Alternative Stacked Monolayers in a Bulk 4Hb-TaSe₂ Heterostructure via Pressure. Nano Letters, 2023, 23, 2121-2128.	4.5	2
49	High-pressure studies of atomically thin van der Waals materials. Applied Physics Reviews, 2023, 10, .	5.5	9
50	Probing the photocarrier dynamics of pressurized graphene using time-resolved Terahertz spectroscopy. Chinese Physics B, 0, , .	0.7	0
54	Greenâ€“Kubo Approach. , 2023, , 359-362.		0
56	Phonon Models. , 2023, , 89-162.		0